

SEQUENCE LISTING

<110> Tamatani, Takuya
Tezuka, Katsunari

<120> CELL SURFACE MOLECULE MEDIATING CELL
ADHESION AND SIGNAL TRANSMISSION

<130> 06501-039001

<140> US 09/383,551

<141> 1999-08-26

<150> PCT/JP98/00837

<151> 1998-02-27

<150> JAPAN 09-62290

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<160> 26

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<220>

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1 5 10 15	

gtt tta aca gga gaa atc aat ggt tct gcc aat tat gag atg ttt ata	96
Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile	
20 25 30	

ttt cac aac gga ggt gta caa att tta tgc aaa tat cct gac att gtc	144
Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val	
35 40 45	

cag caa ttt aaa atg cag ttg ctg aaa ggg ggg caa ata ctc tgc gat	192
Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp	
50 55 60	

ctc act aag aca aaa gga agt gga aac aca gtg tcc att aag agt ctg	240
Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu	
65 70 75 80	

aaa ttc tgc cat tct cag tta tcc aac aac agt gtc tct ttt ttt cta 238
 Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
 85 90 95

tac aac ttg gac cat tct cat gcc aac tat tac ttc tgc aac cta tca 336
 Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
 100 105 110

att ttt gat cct cct cct ttt aaa gta act ctt aca gga gga tat ttg 384
 Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
 115 120 125

cat att tat gaa tca caa ctt tgt tgc cag ctg aag ttc tgg tta ccc 432
 His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
 130 135 140

ata gga tgt gca gcc ttt gtt gta gtc tgc att ttg gga tgc ata ctt 480
 Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu
 145 150 155 160

att tgt tgg ctt aca aaa aag aag tat tca tcc agt gtg cac gac cct 528
 Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
 165 170 175

aac ggt gaa tac atg ttc atg aga gca gtg aac aca gcc aaa aaa tct 576
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 180 185 190

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 Arg Leu Thr Asp Val Thr Leu
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 <213> Homo sapiens

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 Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val
 35 40 45
 Gln Gln Phe Lys Met Gln Leu Lys Gly Gly Gln Ile Leu Cys Asp
 50 55 60
 Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu
 65 70 75 80
 Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
 85 90 95
 Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
 100 105 110
 Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
 115 120 125
 His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
 130 135 140

Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu
 145 150 155 160
 Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
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 180 185 190
 Arg Leu Thr Asp Val Thr Leu
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 Leu Phe Cys Leu Arg Ile Lys Val Leu Thr Gly Glu Ile Asn Gly Ser
 10 15 20 25
 gcc aat tat gag atg ttt ata ttt cac aac gga ggt gta caa att tta 148
 Ala Asn Tyr Glu Met Phe Ile Phe His Asn Gly Gly Val Gln Ile Leu
 30 35 40
 tgc aaa tat cct gac att gtc cag caa ttt aaa atg cag ttg ctg aaa 196
 Cys Lys Tyr Pro Asp Ile Val Gln Gln Phe Lys Met Gln Leu Leu Lys
 45 50 55
 ggg ggg caa ata ctc tgc gat ctc act aag aca aaa gga agt gga aac 244
 Gly Gly Gln Ile Leu Cys Asp Leu Thr Lys Thr Lys Gly Ser Gly Asn
 60 65 70
 aca gtg tcc att aag agt ctg aaa ttc tgc cat tct cag tta tcc aac 292
 Thr Val Ser Ile Lys Ser Leu Lys Phe Cys His Ser Gln Leu Ser Asn
 75 80 85
 aac agt gtc tct ttt ttt cta tac aac ttg gac cat tct cat gcc aac 340
 Asn Ser Val Ser Phe Phe Leu Tyr Asn Leu Asp His Ser His Ala Asn
 90 95 100 105
 tat tac ttc tgc aac cta tca att ttt gat cct cct cct ttt aaa gta 388
 Tyr Tyr Phe Cys Asn Leu Ser Ile Phe Asp Pro Pro Pro Phe Lys Val
 110 115 120
 act ctt aca gga gga tat ttg cat att tat gaa tca caa ctt tgt tgc 436
 Thr Leu Thr Gly Gly Tyr Leu His Ile Tyr Glu Ser Gln Leu Cys Cys
 125 130 135
 cag ctg aag ttc tgg tta ccc ata gga tgt gca gcc ttt gtt gta gtc 484
 Gln Leu Lys Phe Trp Leu Pro Ile Gly Cys Ala Ala Phe Val Val Val

140	145	150	
tgc att ttg gga tgc ata ctt att tgc tgg ctt aca aaa aag aag tat			532
Cys Ile Leu Gly Cys Ile Leu Ile Cys Trp Leu Thr Lys Lys Lys Tyr			
155	160	165	
tca tcc agt gtg cac gac cct aac ggt gaa tac atg ttc atg aga gca			580
Ser Ser Ser Val His Asp Pro Asn Gly Glu Tyr Met Phe Met Arg Ala			
170	175	180	185
gtg aac aca gcc aaa aaa tct aga ctc aca gat gtg acc cta			622
Val Asn Thr Ala Lys Lys Ser Arg Leu Thr Asp Val Thr Leu			
190	195		
taatatggaa ctctggcacc caggcatgaa gcacgttggc cagttttcct caacttgaag			682
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tgcatcagcc agtaaaacaa acacattttac aagaaaaatg ttttaaagat gccaggggta			982
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cataaaaacc acacagcctg gaaattggcc ctggcccttc aagatagcct tctttagaat			2002
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aataataatt cacaaaattt ctgtgaaatc aaatccagtt ttaagaggag ccacttatca			2542
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aaaaaaaa			2610

<210> 4
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 <213> Rattus norvegicus

<220>
 <221> CDS
 <222> (35)...(634)

<400> 4

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gtc ttt gtc ttc tgc ttc cta atc aaa ctt tta aca gga gaa ctc aat      103
Val Phe Val Phe Cys Phe Leu Ile Lys Leu Leu Thr Gly Glu Leu Asn
      10                               15                               20

gac ttg gcc aat cac agg atg ttt tgc ttt cac gat gga ggt gta cag      151
Asp Leu Ala Asn His Arg Met Phe Ser Phe His Asp Gly Gly Val Gln
      25                               30                               35

att tct tgt aac tac cct gag act gtc cag cag tta aaa atg cag ttg      199
Ile Ser Cys Asn Tyr Pro Glu Thr Val Gln Gln Leu Lys Met Gln Leu
      40                               45                               50                               55

ttc aaa gac aga gaa gtc ctc tgc gac ctc acc aag acc aag gga agc      247
Phe Lys Asp Arg Glu Val Leu Cys Asp Leu Thr Lys Thr Lys Gly Ser
      60                               65                               70

gga aac acc gtg tcc atc aag aat ccg atg tcc tgt cca tat cag ctg      295
Gly Asn Thr Val Ser Ile Lys Asn Pro Met Ser Cys Pro Tyr Gln Leu
      75                               80                               85

tcc aac aac agt gtc tct ttt ttc cta gac aac gca gac agc tcc cag      343
Ser Asn Asn Ser Val Ser Phe Phe Leu Asp Asn Ala Asp Ser Ser Gln
      90                               95                               100

ggc agc tac ttt tta tgc agc ctg tgc att ttc gac cca ccc cct ttt      391
Gly Ser Tyr Phe Leu Cys Ser Leu Ser Ile Phe Asp Pro Pro Pro Phe
      105                               110                               115

caa gaa aag aac ctt agt gga gga tat ttg ctt att tat gaa tcc cag      439
Gln Glu Lys Asn Leu Ser Gly Gly Tyr Leu Leu Ile Tyr Glu Ser Gln
      120                               125                               130                               135

ctt tgt tgc cag ctg aag ctt tgg tta ccc gta ggg tgt gca gct ttt      487
Leu Cys Cys Gln Leu Lys Leu Trp Leu Pro Val Gly Cys Ala Ala Phe
      140                               145                               150

gtg gca gcg ctc ctt ttt gga tgc ata ttt atc gtc tgg ttt gca aaa      535
Val Ala Ala Leu Leu Phe Gly Cys Ile Phe Ile Val Trp Phe Ala Lys
      155                               160                               165

aag aag tac aga tcc agt gtg cac gac cct aat agc gag tac atg ttc      583
Lys Lys Tyr Arg Ser Ser Val His Asp Pro Asn Ser Glu Tyr Met Phe
      170                               175                               180

atg gcg gca gtc aac aca aac aaa aag tcc aga ctt gca ggt atg acc      631
Met Ala Ala Val Asn Thr Asn Lys Lys Ser Arg Leu Ala Gly Met Thr
      185                               190                               195

tca taatctggaa cacgggaacc catggaggaa ctacactgtc tagttcccct      684
Ser
200

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gaaacttgaa tggagaaagt cttctatctt ctggaccaca gggcatctga cttgattaac 744
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cctgcttcta gctatgcacc ggccagcaag acaaacatat ctccagcatt tttaaaaaa 984
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gacaggttga aatagycccc atgascstgg aacagwactc cagactgtgc tggagtccca 1764
aagttaggag ggccatggag cctgggacag gctgctgctt tgggtcttag gatctaggaa 1824
raattacaga ggggccaaqa cagagttccc tccccctaga actgtgcagc ctggaagtca 1884
gccctggcac ttttaagatag ccttcttttag aacatgagtt agttggtagt attctgacgt 1944
gtaaacagcc tatkgttgct cggagctgga ccattttctc cacttccctg tctgcatgcc 2004
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<211> 603

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<213> Mus musculus

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<221> CDS

<222> (1)...(600)

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Met Lys Pro Tyr Phe Cys His Val Phe Val Phe Cys Phe Leu Ile Arg
1 5 10 15

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ctt tta aca gga gaa atc aat ggc tcg gcc gat cat agg atg ttt tca 96
Leu Leu Thr Gly Glu Ile Asn Gly Ser Ala Asp His Arg Met Phe Ser
20 25 30

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```

ttt cac aat gga ggt gta cag att tct tgt aaa tac cct gag act gtc 144
Phe His Asn Gly Gly Val Gln Ile Ser Cys Lys Tyr Pro Glu Thr Val
35 40 45

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```

cag cag tta aaa atg cga ttg ttc aga gag aga gaa gtc ctc tgc gaa 192
Gln Gln Leu Lys Met Arg Leu Phe Arg Glu Arg Glu Val Leu Cys Glu
50 55 60

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```

ctc acc aag acc aag gga agc gga aat gcg gtg tcc atc aag aat cca 240
Leu Thr Lys Thr Lys Gly Ser Gly Asn Ala Val Ser Ile Lys Asn Pro
65 70 75 80

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atg ctc tgt cta tat cat ctg tca aac aac agc gtc tct ttt ttc cta 288

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Met Leu Cys Leu Tyr His Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
85 90 95

aac aac cca gac agc tcc cag gga agc tat tac ttc tgc agc ctg tcc 336
Asn Asn Pro Asp Ser Ser Gln Gly Ser Tyr Tyr Phe Cys Ser Leu Ser
100 105 110

att ttt gac cca cct cct ttt caa gaa agg aac ctt agt gga gga tat 384
Ile Phe Asp Pro Pro Pro Phe Gln Glu Arg Asn Leu Ser Gly Gly Tyr
115 120 125

ttg cat att tat gaa tcc cag ctg tgc tgc cag ctg aag ctg tgg cta 432
Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
130 135 140

ccc gta ggg ttg cca gct ttc gtt gtg gta ctg ctt ttt gga tgc ata 480
Pro Val Gly Leu Pro Ala Phe Val Val Val Leu Leu Phe Gly Cys Ile
145 150 155 160

ctt atc atc tgg ttt tca aaa aag aaa tac gga tcc agt gtg cat gac 528
Leu Ile Ile Trp Phe Ser Lys Lys Lys Tyr Gly Ser Ser Val His Asp
165 170 175

cct aat agt gaa tac atg ttc atg gcg gca gtc aac aca aac aaa aag 576
Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
180 185 190

tct aga ctt gca ggt gtg acc tca taa 603
Ser Arg Leu Ala Gly Val Thr Ser
195 200

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<212> DNA
<213> Rattus norvegicus

<220>
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gtc ttt gtc ttc tgc ttc cta atc aaa ctt tta aca gga gaa ctg aat 103
Val Phe Val Phe Cys Phe Leu Ile Lys Leu Leu Thr Gly Glu Leu Asn
10 15 20

gac ttg gcc aat cac agg atg ttt tgc ttt cac gat gga ggt gta cag 151
Asp Leu Ala Asn His Arg Met Phe Ser Phe His Asp Gly Gly Val Gln
25 30 35

att tct tgt aac tac cct gag act gtc cag cag tta aaa atg cag ttg 199
Ile Ser Cys Asn Tyr Pro Glu Thr Val Gln Gln Leu Lys Met Gln Leu
40 45 50 55

ttc aaa gac aga gaa gtc ctc tgc gac ctc acc aag acc aag gga agc Phe Lys Asp Arg Glu Val Leu Cys Asp Leu Thr Lys Thr Lys Gly Ser 60 65 70	247
gga aac acc gtg tcc atc aag aat ccg atg tcc tgt cca tat cag ctg Gly Asn Thr Val Ser Ile Lys Asn Pro Met Ser Cys Pro Tyr Gln Leu 75 80 85	295
tcc aac aac agt gtc tct ttt ttc cta gac aac gca gac agc tcc cag Ser Asn Asn Ser Val Ser Phe Phe Leu Asp Asn Ala Asp Ser Ser Gln 90 95 100	343
ggc agc tac ttt tta tgc agc ctg tgc att ttc gac cca ccc cct ttt Gly Ser Tyr Phe Leu Cys Ser Leu Ser Ile Phe Asp Pro Pro Pro Phe 105 110 115	391
caa gaa aag aac ctt agt gga gga tat ttg ctt att tat gaa tcc cag Gln Glu Lys Asn Leu Ser Gly Gly Tyr Leu Leu Ile Tyr Glu Ser Gln 120 125 130 135	439
ctt tgt tgc cag ctg aag ctt tgg tta ccc gta ggg tgt gca gct ttt Leu Cys Cys Gln Leu Lys Leu Trp Leu Pro Val Gly Cys Ala Ala Phe 140 145 150	487
gtg gca gcg ctc ctt ttt gga tgc ata ttt atc gtc tgg ttt gca aaa Val Ala Ala Leu Leu Phe Gly Cys Ile Phe Ile Val Trp Phe Ala Lys 155 160 165	535
aag aag tac aga tcc agt gtg cac gac cct aat agc gag tac atg ttc Lys Lys Tyr Arg Ser Ser Val His Asp Pro Asn Ser Glu Tyr Met Phe 170 175 180	583
atg gcg gca gtc aac aca aac aaa aag tcc aga ctt gca ggt aca gca Met Ala Ala Val Asn Thr Asn Lys Lys Ser Arg Leu Ala Gly Thr Ala 185 190 195	631
ccc ctt agg gct ttg ggg aga gga gaa cac tct tca tgt caa gac cgg Pro Leu Arg Ala Leu Gly Arg Gly Glu His Ser Ser Cys Gln Asp Arg 200 205 210 215	679
aat taatttggtt atttctattt taaaagaaag acattttttc ccctaaagat Asn	732
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<210> 7

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> primer for PCR

<400> 7

ctgctcgaga tgaagcccta cttctcg

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<223> primer for PCR

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<223> primer for PCR

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<212> DNA

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cattcaagtt tcagggaact agtccatgcg tttc

34

<210> 13
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 <213> *Rattus norvegicus*

<400> 13

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          20          25          30
Phe His Asp Gly Gly Val Gln Ile Ser Cys Asn Tyr Pro Glu Thr Val
          35          40          45
Gln Gln Leu Lys Met Gln Leu Phe Lys Asp Arg Glu Val Leu Cys Asp
          50          55          60
Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Asn Pro
65          70          75          80
Met Ser Cys Pro Tyr Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
          85          90          95
Asp Asn Ala Asp Ser Ser Gln Gly Ser Tyr Phe Leu Cys Ser Leu Ser
          100          105          110
Ile Phe Asp Pro Pro Pro Phe Gln Glu Lys Asn Leu Ser Gly Gly Tyr
          115          120          125
Leu Leu Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
          130          135          140
Pro Val Gly Cys Ala Ala Phe Val Ala Ala Leu Leu Phe Gly Cys Ile
145          150          155          160
Phe Ile Val Trp Phe Ala Lys Lys Lys Tyr Arg Ser Ser Val His Asp
          165          170          175
Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
          180          185          190
Ser Arg Leu Ala Gly Met Thr Ser
          195          200

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<210> 14
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 <212> PRT
 <213> *Mus musculus*

<400> 14

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Met Lys Pro Tyr Phe Cys His Val Phe Val Phe Cys Phe Leu Ile Arg
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Leu Leu Thr Gly Glu Ile Asn Gly Ser Ala Asp His Arg Met Phe Ser
          20          25          30
Phe His Asn Gly Gly Val Gln Ile Ser Cys Lys Tyr Pro Glu Thr Val
          35          40          45
Gln Gln Leu Lys Met Arg Leu Phe Arg Glu Arg Glu Val Leu Cys Glu
          50          55          60
Leu Thr Lys Thr Lys Gly Ser Gly Asn Ala Val Ser Ile Lys Asn Pro
65          70          75          80
Met Leu Cys Leu Tyr His Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
          85          90          95
Asn Asn Pro Asp Ser Ser Gln Gly Ser Tyr Tyr Phe Cys Ser Leu Ser
          100          105          110
Ile Phe Asp Pro Pro Pro Phe Gln Glu Arg Asn Leu Ser Gly Gly Tyr
          115          120          125
Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
          130          135          140

```

Pro Val Gly Leu Pro Ala Phe Val Val Val Leu Leu Phe Gly Cys Ile
 145 150 155 160
 Leu Ile Ile Trp Phe Ser Lys Lys Lys Tyr Gly Ser Ser Val His Asp
 165 170 175
 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
 180 185 190
 Ser Arg Leu Ala Gly Val Thr Ser
 195 200

<210> 15
 <211> 216
 <212> PRT
 <213> Rattus norvegicus

<400> 15
 Met Lys Pro Tyr Phe Ser Cys Val Phe Val Phe Cys Phe Leu Ile Lys
 1 5 10 15
 Leu Leu Thr Gly Glu Leu Asn Asp Leu Ala Asn His Arg Met Phe Ser
 20 25 30
 Phe His Asp Gly Gly Val Gln Ile Ser Cys Asn Tyr Pro Glu Thr Val
 35 40 45
 Gln Gln Leu Lys Met Gln Leu Phe Lys Asp Arg Glu Val Leu Cys Asp
 50 55 60
 Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Asn Pro
 65 70 75 80
 Met Ser Cys Pro Tyr Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
 85 90 95
 Asp Asn Ala Asp Ser Ser Gln Gly Ser Tyr Phe Leu Cys Ser Leu Ser
 100 105 110
 Ile Phe Asp Pro Pro Pro Phe Gln Glu Lys Asn Leu Ser Gly Gly Tyr
 115 120 125
 Leu Leu Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
 130 135 140
 Pro Val Gly Cys Ala Ala Phe Val Ala Ala Leu Leu Phe Gly Cys Ile
 145 150 155 160
 Phe Ile Val Trp Phe Ala Lys Lys Lys Tyr Arg Ser Ser Val His Asp
 165 170 175
 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
 180 185 190
 Ser Arg Leu Ala Gly Thr Ala Pro Leu Arg Ala Leu Gly Arg Gly Glu
 195 200 205
 His Ser Ser Cys Gln Asp Arg Asn
 210 215

<210> 16
 <211> 200
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> consensus sequence

<221> VARIANT
 <222> (1)...(200)
 <223> Xaa = Any Amino Acid

<400> 16

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Met Lys Pro Tyr Phe Xaa Xaa Val Phe Val Phe Cys Phe Leu Ile Lys
 1          5          10          15
Leu Leu Thr Gly Glu Xaa Asn Xaa Xaa Ala Asn His Arg Met Phe Ser
          20          25          30
Phe His Xaa Gly Gly Val Gln Ile Ser Cys Xaa Tyr Pro Glu Thr Val
          35          40          45
Gln Gln Leu Lys Met Gln Leu Phe Lys Xaa Arg Glu Val Leu Cys Asp
          50          55          60
Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Asn Pro
65          70          75          80
Met Xaa Cys Xaa Tyr Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
          85          90          95
Xaa Asn Xaa Asp Ser Ser Gln Gly Ser Tyr Xaa Xaa Cys Ser Leu Ser
          100          105          110
Ile Phe Asp Pro Pro Pro Phe Gln Glu Xaa Asn Leu Ser Gly Gly Tyr
          115          120          125
Leu Xaa Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
          130          135          140
Pro Val Gly Cys Ala Ala Phe Val Xaa Xaa Leu Leu Phe Gly Cys Ile
145          150          155          160
Xaa Ile Xaa Trp Phe Xaa Lys Lys Lys Tyr Xaa Ser Ser Val His Asp
          165          170          175
Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
          180          185          190
Ser Arg Leu Ala Gly Xaa Thr Xaa
          195          200

```

<210> 17

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<223> consensus sequence

<221> VARIANT

<222> (1)...(214)

<223> Xaa = Any Amino Acid

<400> 17

```

Met Leu Xaa Leu Xaa Leu Ala Trp Xaa Leu Xaa Leu Phe Xaa Leu Xaa
 1          5          10          15
Ile Xaa Val Xaa Xaa Xaa Xaa Ile Xaa Val Xaa Gln Xaa Xaa Xaa Xaa
          20          25          30
Xaa Ala Xaa Xaa Asn Gly Xaa Xaa Xaa Xaa Xaa Cys Lys Tyr Xaa Xaa
          35          40          45
Pro Xaa Xaa Xaa Xaa Glu Phe Arg Xaa Xaa Leu Leu Lys Gly Xaa Asp
          50          55          60
Ser Xaa Val Xaa Xaa Cys Xaa Xaa Xaa Xaa Thr Tyr Xaa Xaa Gly Asn
65          70          75          80
Xaa Val Xaa Xaa Lys Xaa Xaa Xaa Xaa Cys Xaa Gly Xaa Leu Ser Asn
          85          90          95
Asn Ser Val Xaa Phe Xaa Leu Gln Asn Leu Xaa Xaa Xaa Xaa Thr Xaa
          100          105          110
Xaa Tyr Phe Cys Lys Xaa Glu Xaa Met Tyr Pro Pro Pro Tyr Xaa Xaa
          115          120          125
Xaa Xaa Xaa Asn Gly Thr Xaa Ile His Val Xaa Xaa Xaa Xaa Leu Cys

```

130	135	140
Pro Xaa Xaa Xaa Phe Xaa Xaa Trp Xaa Leu Xaa Xaa Val Xaa Xaa Xaa		
145	150	155
Leu Xaa Xaa Tyr Ser Xaa Leu Xaa Thr Ala Xaa Ile Xaa Xaa Xaa Xaa		160
	165	170
Xaa Lys Lys Arg Ser Xaa Leu Xaa Xaa Gly Xaa Tyr Met Xaa Met Xaa		175
	180	185
Pro Xaa Xaa Pro Xaa Xaa Xaa Xaa Lys Xaa Xaa Gln Pro Tyr Xaa Xaa		190
	195	200
Asp Phe Xaa Xaa Xaa Xaa		205
210		

<210> 13
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 18
 Met Tyr Pro Pro Pro Tyr
 1 5

<210> 19
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 19
 Tyr Met Asn Met
 1

<210> 20
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 20
 Tyr Val Lys Met
 1

<210> 21
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 21
 Phe Asp Pro Pro Pro Phe
 1 5

<210> 22
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 22
 Tyr Met Phe Met
 1

<210> 23
 <211> 216
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> consensus sequence

<221> VARIANT
 <222> (1)...(216)
 <223> Xaa = Any Amino Acid

<400> 23
 Met Lys Pro Tyr Phe Ser Cys Val Phe Val Phe Cys Phe Leu Ile Lys
 1 5 10 15
 Leu Leu Thr Gly Glu Leu Asn Asp Leu Ala Asn His Arg Met Phe Ser
 20 25 30 35 40 45
 Phe His Asp Gly Gly Val Gln Ile Ser Cys Asn Tyr Pro Glu Thr Val
 50 55 60
 Gln Gln Leu Lys Met Gln Leu Phe Lys Asp Arg Glu Val Leu Cys Asp
 65 70 75 80
 Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Asn Pro
 85 90 95
 Met Ser Cys Pro Tyr Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
 100 105 110
 Asp Asn Ala Asp Ser Ser Gln Gly Ser Tyr Phe Leu Cys Ser Leu Ser
 115 120 125
 Ile Phe Asp Pro Pro Pro Phe Gln Glu Lys Asn Leu Ser Gly Gly Tyr
 130 135 140
 Leu Leu Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
 145 150 155 160
 Pro Val Gly Cys Ala Ala Phe Val Ala Ala Leu Leu Phe Gly Cys Ile
 165 170 175
 Phe Ile Val Trp Phe Ala Lys Lys Lys Tyr Arg Ser Ser Val His Asp
 180 185 190
 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
 195 200 205
 Ser Arg Leu Ala Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 210 215
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

<210> 24
 <211> 16
 <212> PRT
 <213> Rattus norvegicus

<400> 24
 Leu Arg Ala Leu Gly Arg Gly Glu His Ser Ser Cys Gln Asp Arg Asn
 1 5 10 15

<210> 25
 <211> 220
 <212> PRT
 <213> Homo sapiens

<400> 25

```

Met Leu Arg Leu Leu Leu Ala Leu Asn Leu Phe Pro Ser Ile Gln Val
 1          5          10          15
Thr Gly Asn Lys Ile Leu Val Lys Gln Ser Pro Met Leu Val Ala Tyr
          20          25          30
Asp Asn Ala Val Asn Leu Ser Cys Lys Tyr Ser Tyr Asn Leu Phe Ser
          35          40          45
Arg Glu Phe Arg Ala Ser Leu His Lys Gly Leu Asp Ser Ala Val Glu
          50          55          60
Val Cys Val Val Tyr Gly Asn Tyr Ser Gln Gln Leu Gln Val Tyr Ser
65          70          75          80
Lys Thr Gly Phe Asn Cys Asp Gly Lys Leu Gly Asn Glu Ser Val Thr
          85          90          95
Phe Tyr Leu Gln Asn Leu Tyr Val Asn Gln Thr Asp Ile Tyr Phe Cys
          100          105          110
Lys Ile Glu Val Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu Lys Ser
          115          120          125
Asn Gly Thr Ile Ile His Val Lys Gly Lys His Leu Cys Pro Ser Pro
          130          135          140
Leu Phe Pro Gly Pro Ser Lys Pro Phe Trp Val Leu Val Val Val Gly
145          150          155          160
Gly Val Leu Ala Cys Tyr Ser Leu Leu Val Thr Val Ala Phe Ile Ile
          165          170          175
Phe Trp Val Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met
          180          185          190
Asn Met Thr Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro
          195          200          205
Tyr Ala Pro Pro Arg Asp Phe Ala Ala Tyr Arg Ser
          210          215          220

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<210> 26

<211> 223

<212> PRT

<213> Homo sapiens

<400> 26

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Met Ala Cys Leu Gly Phe Gln Arg His Lys Ala Gln Leu Asn Leu Ala
 1          5          10          15
Ala Arg Thr Trp Pro Cys Thr Leu Leu Phe Phe Leu Leu Phe Ile Pro
          20          25          30
Val Phe Cys Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala
          35          40          45
Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly
          50          55          60
Lys Ala Tyr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln
65          70          75          80
Val Thr Glu Val Cys Ala Ala Thr Tyr Met Thr Gly Asn Glu Leu Thr
          85          90          95
Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val
          100          105          110
Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile
          115          120          125
Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly
          130          135          140
Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser
145          150          155          160
Asp Phe Leu Leu Trp Ile Leu Ala Ala Val Ser Ser Gly Leu Phe Phe
          165          170          175

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Tyr	Ser	Phe	Leu	Leu	Thr	Ala	Val	Ser	Leu	Ser	Lys	Met	Leu	Lys	Lys
			180					185					190		
Arg	Ser	Pro	Leu	Thr	Thr	Gly	Val	Tyr	Val	Lys	Met	Pro	Pro	Thr	Glu
		195					200					205			
Pro	Glu	Cys	Glu	Lys	Gln	Phe	Gln	Pro	Tyr	Phe	Ile	Pro	Ile	Asn	
	210					215					220				